Borough of Gravesend



1937

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR 1937.



Borough of Gravesend



1937

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR 1937.



PUBLIC HEALTH COMMITTEE

THE MAYOR (Councillor A. W. HOWCROFT, J.P.)

Alderman J. A. Axcell (Chairman)

Alderman Morris (Vice-Chairman)

Alderman Huggins, J.P. Councillor Dr. Hagard

,, Harrington, J.P. ,, Mrs. Cole, J.P.

" Simmonds " Jennings

Councillor Hodge, J.P. ,, Robertson

,, Robson ,, Davidson

Woodward .. Fletcher

Councillor McKenzie, J.P.

STAFF.

Clerks:

Mr. S. V. Tonge

Mr. A. H. BAKER

Mr. D. V. PROTHERO

Miss G. Pretty

Health Visitors:

Miss S. A. Cross, S.R.N., S.C.M.

* Miss A. Dixon, S.R.N., S.C.M.

Miss C. M. Bovington, S.R.N., S.C.M.

District Sanitary Inspectors:

† Mr. J. F. CREIGHTON, Cert. S.I.B.

† Mr. W. A. COLLINS, Cert. S.I.B.

Mr. O. B. Dodds, Cert. S.I.B.

Chief Sanitary Inspector and Inspector under the Food and Drugs Act † Mr. J. E. Baker, M.S.I.A., C.R.S.I.

Medical Officer of Health:

C. D. OUTRED, D.P.H., M.R.C.S., L.R.C.P., L.D.S.(ENG.)

* Part time Health Visitor and School Nurse.

† Also holds Meat and Food Inspector Certificate.



Public Health Department,

Town Hall,

Gravesend.

1st June, 1938.

The Worshipful The Mayor, Aldermen and Councillors of the Borough of Gravesend.

MR. MAYOR, LADIES AND GENTLEMEN,

I have the honour to submit my 27th Annual Report on the health of the Borough in respect of the year 1937.

The Report has been compiled on the lines recommended by the Ministry of Health and statistical tables will be found following the written matter at the end of the report.

There is little variation in the Birth, Death and other rates, which have been calculated on the estimated population given by the Registrar General. While there is a slight decrease in the Birth Rate, the Death Rate shows an increase on the rate for the previous year.

The Infant Mortality rate has risen after the decrease of the past two years, but compares favourably with that for the rest of England.

I desire to express my thanks to Dr. Roper, the Tuberculosis Officer, for the assistance he has rendered to my Department during the year and to Dr. Nicol and Miss Hammond for supplying some of the particulars included in this report.

I should like to express my thanks and indebtedness to the Chairman, Alderman Axcell, and the Members of the Health Committee for their sympathetic consideration of the various eports submitted to them during the year.

In conclusion, I also desire to record the loyal co-operation and support of my Senior Inspector, Mr. Baker, and the whole of my Staff.

I am, Mr. Mayor, Ladies and Gentlemen, Your obedient Servant,

C. D. OUTRED,
Medical Officer of Health.

Digitized by the Internet Archive in 2017 with funding from Wellcome Library

Annual Report

VITAL STATISTICS FOR THE YEAR, 1937.

Population: Census 1921, 31,137; 1931, 35,400.

,, Estimated to mid-year 1937—By Register General, 39,460

,, Hamada to ma year 1957 by Ka	-815101 0	ciiciai,	39,400
A f 41 - D	1935.	1936.	1937.
Area of the Borough in acres (land and inland water) Density of Population, persons per acre		4,169 8.5	
Marriages, No. 359 Marriage Rate per 1,000 population Births, No. 599 (net) Birth Rate per 1,000	8.96	9.6	9.09
population Deaths, No. 466 (net) Death Rate per 1,000	15.4	15.68	15.17
population Infantile Deaths, No. 32 Rate per 1,000	10.0	ıi.18	11.55
Live Births Death Rate from :—	45.9	37.2	53.4
Tuberculosis (all forms) per 1,000 population		·55 1.70	
population Violence (including suicide) per 1,000	2.72	2.05	2.58
population Respiratory Diseases (including Pneu-	.49	.50	.60
monia) per 1,000 population Infantile Diarrhoea (under 2 years) per	1.2	1.0	1.5
I,000 population Puerperal Sepsis, per 1,000 Live Births Other Puerperal Causes, per 1,000 Live	1.7 3.4	8.1 1.62	
Births	5.1	1.62	1.66

THE AREA OF THE BOROUGH.

		Land.	Inland Water.		Foreshore.	Total Acres.
Gravesend Milton Denton and Chalk	*******	700 859 2,429	0 6 12	70 152 337	7 27 10	77 1,054 2,788
	-	3,998	18	559	44	4,619

POPULATION OF THE BOROUGH.

Census:	1901	*****	27,196	1911	\d	28,115
	1921	*******	31,137	1931	******	35,400

The extension of the Borough Boundary became effective as from April 1st, 1935 and includes the Parishes of Denton, Chalk and part of the Parishes of Northfleet, Cobham and Ifield.

The estimated population to mid-year 1937, as given by the Registrar General is 39,460, and the Birth, Death and other rates have been calculated on this figure.

The probability is that the next census will reveal a substantial increase in the population as many houses are still being erected in the extended boundary by speculative builders.

RATEABLE AND ASSESSABLE VALUE.

Gross Value (1st October, 1	937)	******	*****	£394,859
Rateable Value	*****	*******	W-1 06 0 0 0	£331,512
Yield of Id. Rate	******	0000000	******	£1,292
Rates (to 31st March, 1938)	u e e e e e e e	*****	12	1/8d. in the £.

MARRIAGES.

The number of marriages registered in the Borough during the year was 359; 231 were solemnised in churches and chapels and 128 in register office.

This gives a marriage rate of 9.09 per 1,000 population as compared with 9.6 for the previous year.

The number and rate for the last five years was as follows:—

					1936	
Rate per 1,000 population	• • •	8.8	9.60	8.96	9.6	9.09
Number of Marriages	• • •	310	337	342	378	359

BIRTHS.

The total number of live births registered of residents in the District was 599 (296 males and 303 females) giving a Birth Rate of 15.17 per 1,000 of the present population as estimated by the Registrar General. This figure compares with a rate of 15.68 for the year 1936.

Twenty live births were registered as illegitimate, and 28 still births were also registered.

One hundred and thirty-six births were transferred to other Districts and 41 were transferred "in."

Births notified under the Notifications of Births Act were as follows:—606 live births and 31 still births, total 637. These were attended by General Practitioners in 379 instances, and by midwives 258. There were 26 live or still births which occurred in the District which were not notified.

The excess of births over deaths, showing a natural increase of population for the year 1937, was 133.

The Birth Rate for the past 10 years is shown hereunder for comparison.

1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
18.3	18.8	19.7	18.6	16.8	16.7	15.6	15.4	15.6	15.1

ILLEGITIMATE BIRTHS.

Of the total births registered (599) 20 were illegitimate, 10 males and 10 females, giving a rate of 3.37 per cent. Only one death of an illegitimate infant was registered under one year of age. No still births were registered as illegitimate.

The illegitimate rate compares with 4.05 for the previous year, the comparative rates for the past 10 years being as follows:—

DEATHS.

Four hundred and sixty-six deaths were registered during the year (251 males, 215 females), giving a Death Rate of 11.55 per 1,000 population, which compares with 11.9 for the "Smaller Towns" of England and Wales.

Eighty deaths of residents were transferred "in" from other Districts and 102 were transferred "out."

The chief certified causes of death were as follows:—Heart Disease, 79; Cancer, 63; Cerebral Haemorrhage, 40; All Forms of Tuberculosis, 33; Bronchitis, 28; Senile Decay, 26; Pneumonia, 25; Suicide and Other Violence, 24; Circulatory Diseases, 21; Nephritis, 17; Influenza, 16; Digestive Diseases, 14; Congenital Diseases, 13; Other Respiratory Diseases, 9.

Two hundred and sixteen deaths occurred at the age of 65 or over, or 46 per cent. of the total deaths.

The age periods at deaths of those over 65 years were as follows:—

	65 yrs.	70 and	75 and	So and	85 and	90 and	Over
	under	under	under	under	under	under	95 yrs.
	70 yrs.	75 yrs.	80 yrs.	85 yrs.	90 yrs.	95 yrs.	
Sex	M. F.						
	22 15	27 31	23 21	18 24	12 14	5 3	I
Tota	1 37	58	44	42	26	8	I

INFANTILE MORTALITY.

Thirty-two deaths were registered under I year of age, 24 males and 8 females. This gives an Infant Mortality Rate of 53.4 per 1,000 births, compared with 23 deaths or a Rate of 37.2 for the year 1936.

This compares favourably with the rest of England and Wales and the 148 "Smaller Towns," which is 58 and 55 per '1,000 births respectively.

The number and rates for the last 10 years are given hereunder:—

Year	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
No.	30	27	27	22	41	34	33	27	23	32
Rate	47.7	41.7	39	33.0	67.8	57.7	60.4	45.9	37.2	53.4

The chief certified causes of death were as follows:—

Premature Birth, 6; Pneumonia, 6; Diarrhoea, 4; Atelectasis, 3.

Of the 32 deaths, 14 were under 3 months of age. One infant death was registered as illegitimate.

MATERNAL MORTALITY.

Under the provisions of the Public Health Act, 1936, Puerperal Fever is no longer a notifiable infectious disease, but such cases are now notifiable as Puerperal Pyrexia.

One notification of Puerperal Pyrexia was received during the year from which the patient completely recovered.

Of the total deaths three were registered as from Maternal Causes which gives a Maternal Mortality rate of 4.78 per 1,000 live and still births.

The certificates of deaths gave the following causes:—

- (i) Chronic Brights Disease and Albuminuria of Pregnancy;
- (ii) Postpartum Haemorrhage and Albuminuria of Pregnancy;
- (iii) Influenze, Pneumonia following Childbirth (7 days after).

There were also two material deaths in registered Nursing Homes in the District, but were non-residents and therefore were not included by the Registrar General in the return of deaths.

Precautions were taken in each case by fumigation of premises and the removal of bedding, etc., for disinfection.

INFECTIOUS DISEASES.

One hundred and twenty-nine persons were certified as suffering from notifiable infectious diseases, of which number 67 were removed to hospitals for treatment and isolation.

The cases notified were Scarlet Fever, 57; Diphtheria II; Pneumonia, 8; Erysipelas, 6; Puerperal Pyrexia, I; Pulmonary Tuberculosis, 39; and Other Forms of Tuberculosis, 7.

Only two deaths of residents were registered from infectious diseases as apart from Tuberculosis, these were from Scarlet Fever. The deaths from Respiratory Tuberculosis were 28, and from Non-Respiratory Tuberculosis 5.

The schedule of notifiable infectious diseases under the Act of 1899 includes Small-pox, Cholera, Diphtheria and Membraneous Croup, Erysipelas, and Scarlet, Typhus, Enteric, Continued, Relapsing and Puerperal Fevers.

The following diseases have also been made compulsorily notifiable:—Plague (1900), Tuberculosis all forms (1913), Cerebro Spinal Fever and Acute Poliomyelitis (1912), Ophthalmia Neonatorum (1914), Malaria and Dysentery, Acute Primary Pneumonia and Acute Influenzal Pneumonia (1927).

Under the provisions of the Public Health Act, 1936, Continued Fever and Puerperal Fever are no longer notifiable infectious diseases, but the latter disease is now included under the heading of Puerperal Pyrexia and notifiable as such.

The following cases of notifiable infectious diseases occurred during the past ten years:—

		1928	1929	1930	1931	1932
Diphtheria	•••••	154	41	19	9	25
Small-pox			7	4		
Scarlet Fever		70	67	108	51	52
Erysipelas		5	17	16	3	IO
Enteric Fever		3		3		
Puerperal Fever			I		I	
Puerperal Pyrexia		3	I	I	I	
Cerebro Spinal Fever	•••••		I	I	I	
Poliomyelitis				I		
Encephalitis Lethargica		I			I	
Ophthalmia Neonatorum	n	2	2			
Tuberculosis Pulmonary		32	39	38	30	33
Tuberculosis Other Form	ns	18	15	15	IO	5
Pneumonia	******	6	27	9	18	14
Dysentery	•••••	I				·
Total	*******	295	218	215	125	139

Diphtheria Scarlet Fever	U ••••	1933 84 88	1934 60 114	1935 24 68	1936 2 32	1937 11 57
Small-pox	******	I				
Erysipelas		8	12	7	S	6
Enteric Fever						
Puerperal Fever	******	3	3	6	I	
Puerperal Pyrexia	******	4	I	2		I
Cerebro Spinal Fever	*******					
Poliomyelitis	******	I	2			
Encephalitis Lethargica		I			2	
Ophthalmia Neonatorum		4	I	I	5	
Tuberculosis Pulmonary		37	21	22 _	33	39
Tuberculosis Other Forms	S	5	14	4	8	7
Pneumonia		13	14	12	18	8
Total	******	249	242	146	109	129

SCARLET FEVER.

Fifty-seven persons were notified as suffering from this disease, 28 males and 29 females, an attack rate of 1.44 per 1,000 of the population.

The number of cases removed to the Gravesend Isolation Hospital was 47, of which two proved fatal. They were a boy aged $1\frac{1}{2}$ and a girl aged 4 of the same family. Both the children were dangerously ill when admitted, having the disease in a very virulent form, and died, the former within 2 days and the latter within 5 days of their admission to the hospital.

Three children were admitted to the infectious Hospital with suspected scarlet fever but the diagnosis was not confirmed and are not, therefore, included in the above.

The age periods affected were as follows:—.

	ı and	5 and	15 and	25 and
	under	under	under	under
Sex	5 yrs.	15 yrs.	25 yrs.	45 yrs.
	M. F.	M. F.	M. F.	M. F.
	5 5	22 19	I	I 4
Total	10	41	I	5

DIPHTHERIA.

There were II persons notified as suffering from this disease during the year as compared with two for the previous year.

The majority of the cases were of mild type with little if any clinical signs of the disease.

Eight cases were removed to the Borough Isolation Hospital and recovered without any complications arising.

All those affected were of the School Age Group, namely, between 5 and 15 years of age.

There were two children admitted to the Hospital under suspicion but after negative results of three bacteriological examinations were obtained they were no longer detained in hospital.

The facilities offered by the Kent County Council for the bacteriological examination of swabs, etc., proves very beneficial in determining the disease in the early stages.

THE ISOLATION HOSPITAL.

The present Staff at the Borough Isolation Hospital consists of a Matron, 2 Staff Nurses, 2 Assistant Nurses and 2 Probationer Nurses; an Engineer (whose duties include attention to the furnaces, disinfection plant and assisting in the garden) and a Gardener.

Eighty-four persons were admitted to the Hospital for isolation and treatment:—Scarlet Fever, 47; Diphtheria, 8; Pneumonia, 5; Puerperal Pyrexia, 1; Cerebro Spinal Fever, 2; Erysipelas, 1; Septic Throat, 10; Observation cases, 9.

Four deaths occurred in the Hospital; 2 Scarlet Fever, I Pneumonia, I Cerebro Spinal Fever.

The two Scarlet Fever patients were aged $1\frac{1}{2}$ and 4 years. Both children were dangerously ill when admitted and died, the former within 2 days and the latter within 5 days of admission.

Two patients were admitted from the Northfleet Urban District suffering with Cerebro Spinal Fever. Both cases were dangerously ill when admitted. One, a boy of 15, died on the second day after admission and the other, aged 12, after remaining in a critical condition for 5 days, made a remarkable recovery and was discharged cured, with no after effects, 26 days after admission to the Hospital.

A man, aged 32, was admitted suffering from Pneumonia and died 3 hours after admission. He was seen by the Medical Superintendent immediately on admission, but his condition was such that little could be done for him.

TUBERCULOSIS.

The number of Primary notifications of persons suffering from Tuberculosis during the year was 46, 39 Respiratory and 7 "Other Forms."

In addition to the above, 6 notifications of transfer were received of persons suffering from the disease having come to reside within the Borough. Ten persons were notified to other Districts upon leaving the Town.

The following table shows the sex and age periods of the cases notified:—

	5 to	15 to	25 to	45 to	Over	Total at
	15 yrs.	25 yrs.	45 yrs.	65 yrs.	65 yrs.	all ages.
	M. F.					
Respiratory	3 2	3 5	7 9	6 2	2	
	5	8	16	8	2	39
"Other Forms"	I 2	I 2	I			
	3	3	I			7 .
Totals	8	II	17	8	2	46

The following gives the source from which notification was received:—

Tuberculosis Officer	*****	*******	17
General Practitioners	******		12
General Hospitals	******	*******	9
Public Assistance M.O's	S	*******	6
Sanatoria	•••••	*******	2

The total number of persons residing within the Borough as shown by the Tuberculosis Register at the end of the year was:—

	Males.	Females.	Total.
Pulmonary	82	52	134
"Other Forms"	22	22	44
	104	74	178

This shows an increase of 9 over the previous year when the number was 169.

Twenty-eight deaths were registered from Tuberculosis of the Respiratory system, and 5 "Other Forms" showing a mortality rate from All Forms of Tuberculosis of .83 per 1,000.

Gravesend Tuberculosis Dispensary.

I am indebted to Dr. Charles Roper, the Tuberculosis Officer in charge of the Gravesend Dispensary, for the following particulars concerning the treatment of patients during the year. It should be noted that the figures relate to a wider area and are not solely confined to the residents within the Borough of Gravesend.

New Cases seen at the Dispensary during 1937.

	A	dults	Chile	dren
	Male	Female	Male	Female
Pulmonary		20	I	4
Non-Pulmonary Negative	7.5	30	15	8

Contacts examined—not included in the above.

	Adul	ts	Childre	en
	Male	Female	Male	Female
Pulmonary Non-Pulmonary Negative	 3	<u>1</u> 6	I 2 12	

Total number attendances of	1	<u> </u>	~
during the year		• • • •	873
		0 6	. •
Number of patients who comp			
treatment during the yea	ır		62

CANCER.

Deaths from Cancer numbered 63 for the year 1937, which compares favourably with 67 for the previous year. This shows a mortality rate of 1.59 per 1,000.

Again, as in previous years, the females exceeded the males,—55 per cent. against 44 per cent. respectively.

For the past 10 years the number of deaths and the corresponding rates are shown hereunder:—

The following table gives the organs affected, the sex and age at death:—

Organ Affected.	Males Ages at Death.	Females Ages at Death.	Total.
Digestive Organs Breast Generative Organs Stomach Aesophagus Bladder Larynx Lung Liver Jaw Kidney Brain Tongue	45, 57, 65, 66, 68, 73, 74, 77 53, 62, 63 61, 74, 84 57, 69, 73, 75 72, 77 47, 47, 55 49, 77 72 47 64	58, 58, 66, 67, 71, 72, 74, 75, 79, 81, 87 50, 52, 56, 61, 64, 66, 70, 77 46, 55, 56, 59, 60, 69, 77 46, 56, 63, 78 63, 72 62 56, 70	19 8 7 7 5 4 3 3 2 2 1 1
Total	Males 28	Females 35	63

In connection with the British Empire Cancer Campaign, a lecture was arranged at the Toc H. A Medical Practitioner was appointed to give the address and he reported that it was well attended and greatly appreciated. He was impressed with the intelligence of some of the questions asked and it seems evident, in view of the interest taken, that further lectures should be arranged.

BACTERIOLOGICAL.

The facilities of the County Laboratory are placed at the disposal of the General Practitioners, the Institutions and the Public Health Services for the examination of material sent for determining the presence of disease.

During the year extensive use has been made of these services which are entirely free of charge and the following table shows the results obtained from the specimens dispatched.:—

Specimens for Disease	Y	~	Genera		. •	Public I Services	
Suspected.	1	Pos.	Neg.	Total.	Pos.	Neg.	Total.
Tuberculosis		24	134	158		4	4
Diphtheria	*******	12	71	83	24	64	88
Ring Worm			Í	I	8	4	12
Typhoid	******		I	I			
Septicaemia			22	22			
Total		36	229	265	32	72	104

VACCINATION.

I am indebted to Miss Hammond, the Vaccination Officer, for the following particulars as to the number of infants vaccinated in the Borough during the year 1937 under the Vaccination Act, 1867-1896.

The numbe	r of succes	ssful v	accinations	was		405
The number	of declara	tions o	f objection t	to vacc	cination	
was		*******	*******	*****	******	258
Certificates	submitted	for po	ostponement	t	******	7

It is to be regretted that there is still a marked objection to this simple but very effective operation of protection against small-pox and it also is regrettable that the public are able to obtain so easily the signature of some person holding a public position to substantiate these declarations of objection.

Every year a considerable number of contacts with small-pox are reported, mostly connected with cases on ships from the East, for supervision until the expiry of the incubation period.

I would emphasise once again the great risk the residents of this Borough run in the association of persons connected with ships trading with foreign ports.

This should be an incentive to all parents to have their children protected against this terrible disease and not postpone vaccination until small-pox is in our midst.

MATERNITY AND CHILD WELFARE.

During the year there were 606 live births and 31 still births notified; 26 births were not notified. The notification indicated that 379 were attended by Midwives, and 258 by Doctors; 136 births were transferred "out" and 41 were transferred "in."

The Health Visitors in their report on the visitation of homes give the following figures relating to their respective districts:—

Gravesend (Nurse Cross).

Visits to infants under I year of age		I022
Visits to infants over I year and under 5	******	2484
Total visits to Expectant Mothers	******	201
Number of persons having charge of Foster Child	ren	4
Number of Foster Children on Register	*******	4
Number of visits to Foster Children		18
Investigation of cases of Difficult Maternity		IO
Miscellaneous visits	******	4
Investigations concerning Maternal Deaths	•••••	2
Enquiries re Adoption Orders	******	3

Milton (Nurse Bovington) (6 months).

Visits to infants under I year of age	402
Visits to infants over I year and under 5	1073
Total visits to Expectant Mothers	91
Number of persons having charge of Foster Children	4
Number of Foster Children on Register	4
Number of visits made to Foster Children	23
Enquiries re Adoption Orders	5
Miscellaneous visits	33
	33

Denton (Nurse Dixon (Part time school nurse).

Visits to infants under I year of age	554
Visits to infants over I year and under 5	1515
Visits to Expectant Mothers	89
Number of Persons having charge of Foster Children	2
Number of Foster Children on Register	3
Number of visits made to Foster Children	12
Number of enquiries re Adoption Orders	3
Miscellaneous visits	IO

Welfare Centres.

There are three Welfare Centres in the Borough serving (1) Denton and Chalk, (2) King's Farm Estate, and (3) Central Gravesend (Windmill Street). These Centres are open for the benefit of ante-natal and post-natal mothers and their infants up to 5 years of

age. They are open on the following afternoons:—Mondays, Thursdays and also on Fridays, at Windmill Street Centre, and at Whitehill Centre (King's Farm) on Tuesdays. The Denton Centre which is open on Wednesdays is held, temporarily, at the Gordon Mission.

The total attendances at all three Centres for the year 1937 are included in the figures given below:—

Total attendances of children under I year of age Total attendances of children between the age of	3684
I and 5 years	373I
Attendances of individual children under I year of age who attended for the first time	358
Attendances of children who attended for the first time between the age of I year and 5 years	140
Attendances of Post Natal Mothers	280

The following ailments were met with at the Welfare Centres during the year:—

Debility	*******	64	Rashes		•••••	6
Feeding conditions	******	97	External Eye	Disease		8
Bronchial Catarrh		48	Whooping Cou	igh	******	6
Constipation		44	Colds		******	21
Circumcision	******	36	Naevi	******	******	2
Diarrhoea	******	22	Rickets	•••••	********	2
Dental Caries		14	Tongue Tie	******	*******	3
Skin diseases	******	14	Umbilical Her	nia	******	17
Cuts and sores	******	12	Miscellaneous	******		38
Otitis Media		6				

Complications of Maternity.

During the year 23 persons were admitted to the Gravesend and North Kent Hospital under the scheme for the treatment of Difficult Maternity. These are admitted in cases of emergency and, by agreement with the Hospital, the Town Council accepts the responsibility for payment.

The charge to the Council is £3 per week and where the financial circumstances of the family, taking into consideration the rent, number of children, the wages of the man, etc., justify it, a claim is made on the man for the recovery of part of the expense so incurred.

In many instances only the maternity benefit of two guineas is offered.

Distribution of Free Milk.

Three hundred and twenty-seven individual mothers or infants were approved, after investigation, and granted free milk under the provisions of the Maternity and Child Welfare Order of the Ministry of Health.

The Order, No. 1072, dated 1930, empowers the Council to grant free milk and medical necessities to expectant and nursing mothers and their infants up to 5 years of age.

In certain circumstances such as illness, allowances of milk may be made at the discretion of the Committee to infants up to 5 years although the income of the family exceeds the limit of the scale for the time being in operation.

Considerable demands have been made upon the Council under this scheme and the expenditure involved amounted to £840 during the year 1937. The quantities so distributed were as follows:—

Fresh milk	2,769 pts.	Dried milk	*******	9,344 lbs.
Honicose Malt	202 lbs.	Virol	•••••	$168 \frac{1}{2}$ -lbs.
Malt and Oil	216 lbs.	Marmite	*******	20 İbs.

Maternity Fees.

Maternity fees were granted in II instances where men were not qualified, through unemployment, to obtain the National Health Insurance Benefit.

This provision is made under the Child Welfare scheme to safeguard the midwife, if her fee, owing to poverty, is not forthcoming.

Municipal Midwives.

With the advent of the Midwives Act, 1936, which came into operation on 1st October, 1937, a Municipal midwifery service was put into operation and there are now five Midwives in the Borough of Gravesend who are salaried officers of the Kent County Council and who are engaged by persons at recognised fees, which are collected by the County Council.

Two infants were provided with orthopaedic apparatus at the expense of the Child Welfare Scheme in conjunction with the Royal Orthopaedic Hospital, and one child was sent to a convalescent home at Folkestone for a short period.

Ladies' Voluntary Committee.

The Members of this Committee continue to render the most valuable assistance to the mothers of the Town in administering the sales of dried milks and various medical preparations at cost price. This service is most ably carried out by the ladies who attend on the afternoons the Centres are open for this purpose and to whom great credit is due for their organisation.

The amounts of the foods, etc., sold at cost price, at the three Centres during the year amounted to a turnover of £1,006, and were as follows:—

Ostermilk	740	Malt and oil	788
Cow & Gate	5,838	Robelein	128
Lactogen	I43	Maltoline	521
Virol	I,882	Trufood	55I
Virolax	163	Marmite	486
Lactogol	I7	Humanised Trufoo	d 1,070
Patent Groats	287	Almata	86
Ovaltine	2,57 ⁸	Brestol	35

NURSING HOMES REGISTRATION ACT, 1927.

No applications were made for registration during the year-There are four Nursing Homes registered in the Borough and two institutions which are exempt from the requirements of the Act as regards registration.

Periodical visits are made to these registered homes and they appear to be properly conducted.

CHILDREN ACT, 1908, PART I.

Eight persons were registered as Foster Parents to receive children for reward under the conditions of the above Act.

Nine children were maintained under supervision of the Council's officers and the total number of visits paid during the year was 53. In all cases the children were found to be properly cared for.

The appointed protection officers under this Act are the Medical Officer of Health and his Staff of Health Visitors.

HOUSING.

		HUUSING.	
(1)	Ins	pection of Dwelling-houses.	
, ,		Total number of dwelling-houses inspected for	
		housing defects (under Public Health or Housing	
		Acts)	1323
		Number of inspections made for that purpose	5046
	(2)	Number of dwelling-houses (included under the	
		preceding heading) which were inspected and	
		recorded under the Housing Consolidated Regula-	
		tions, 1925	371
		Number of inspections made for that purpose	2756
	(3)	Number of dwelling-houses found to be in a state	
		so dangerous or injurious to health as to be unfit	
		for human habitation	4
	(4)	Number of dwelling-houses (exclusive of those	
		referred to under the preceding sub-heading) found	
		not to be in all respects reasonably fit for human	
		habitation	900

(2)	Re	medy of Defects without Service of Formal Notice	ces.
		Number of defective dwelling-houses rendered fit in consequence of informal action by the Local	
		Authority or their officers	910
(3)	Ac	tion under Statutory Powers.	
	Α.	Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936:	
	(1)	Number of dwelling-houses in respect of which notices were served requiring repairs	9
	(2)	Number of dwelling-houses which were rendered fit after the service of formal notices:—	
		(a) by owners	6
		(b) by local authority in default of owners	Nil
	В.	Proceedings under Public Health Acts:—	
	(1)	Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	25
	(2)	Number of dwelling-houses in which such defects were remedied after service of formal notices:—	
		(a) by owners (b) by local authority in default of owners	20 Nil
	C.	Proceedings under Sections 11 and 13 of the Housing Act, 1936:—	
	(1)	Number of dwelling-houses in respect of which Demolition Orders were made	Nil
	(2)	Number of dwelling-houses demolished in pursuance of Demolition Orders	Nil
	(3)	Demolished in anticipation of Demolition Orders	4
	D.	Proceedings under Section 12 of the Housing Act, 1936:—	
	(1)	Number of separate tenements or underground rooms in respect of which Closing Orders were made	Nil
	(2)	Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	Nil
(1)	To	tal Number of houses owned by the Local	
(4)	10	Authority	1291

(5) Number of new houses built during the year :—

	(a) (b)	by the Local Authority by other bodies or persons	Nil 306
Housing	, Ac	et, 1936, Part IV, Overcrowding:—	
(a)	(1)	Number of dwellings overcrowded at the end of the year	46
	(2)	Number of families dwelling therein	47
	(3)	Number of persons dwelling therein	388
(b)		Number of new cases of overcrowding reported during the year	14
(c)	(1)	Number of cases of overcrowding relieved during the year	73

WATER SUPPLY.

(persons displaced)

(2) Number of persons concerned in such cases

327

Arrangements have been made for samples from the public water supply to be taken and submitted each month for bacteriological analysis.

The source of supply is obtained in the old portion of the Borough from the Gravesend and Milton Water Company, and in the added Areas (Denton and Chalk) from the Higham and Hundred of Hoo Water Company.

As in past years little comment can be made on the public water supply, apart from the unvarying high standard of purity and the abundant supply which is always available.

The purity of these waters, both from the Gravesend Company and the Higham & Hundred of Hoo Company, will be seen by reference to the Analyst's reports which will be found in the Chief Sanitary Inspector's Section of this Report.

COMMON LODGING HOUSES.

There were four Common Lodging Houses in the Borough which are under the supervision of the Police.

During the year 22,802 lodgers have been accommodated, of whom 20,866 were males and 1,936 females.

434 males and 420 females were between the ages of 8 and 12 years, and 48 females were under 8 years of age.

Two of these lodging houses were closed during the year.

INQUESTS.

Thirty-three inquests were held during the year by the Borough Coroner, Evans Penman, Esq., and verdicts were returned follows:—Accidental Death 25; Suicide, 6; Found Drowned, I; Natural Causes, 1.

There were also 41 sudden deaths into which the Police instituted enquiries.

NEW OPEN AIR BATHING POOL, ORDNANCE ROAD.

A new Open Air Bathing Pool is now being constructed by the Council at Ordnance Road, near the Promenade, and will be

open for the Summer Season, 1938.

The main pool is 150 ft. long by 75ft. wide, and has two shallow areas and a diving pit, the diving apparatus includes the following diving boards, I metre fixed, I metre spring, 3 metre fixed, 3 metre spring and 5 metre fixed and a chute.

There is accommodation for 800 bathers at any one time and

further provision can be provided if necessary.

Wide surrounds and large areas provide for sunbathing, whilst a spectators' terrace surrounds the site.

On the first floor of the building a Cafe and Spectators' Gallery

is provided, affording a splendid view of the whole of the site.

The Children's Paddling Pool, 50 ft. by 50 ft. with its own surround is separated from the main pool by a terrace.

Bathing by floodlight will be a feature for warm summer

evenings and there are car parking facilities.

The 500,000 gallons of water in the pools will be filtered, aerated, sterilized and heated by the most up-to-date and efficient plant ensuring bathing with perfect safety and an even temperature with a complete change of water every six hours.

No decision has been made as to the use to which the Corporation's Swimming Bath on the Promenade will be put.

ADOPTIVE ACTS.

The following Acts (among others) are in force within the Borough:—

Public Health Acts Amendment Act, 1890:—

(Parts II, III, IV, V).

Public Health Acts Amendment Act, 1907.

(Part II, III (34-38, 43-51).

(Part IV, 52-60, 62-66). (Part V, VI, VII (79, 81, 85, 86).

(Part VIII, LX, X (92, 93, 95).

Public Health Acts, 1925.

(Parts II, III, IV, V). Small Dwellings Acquisition Acts, 1899, to 1935.

BYE-LAWS AND REGULATIONS.

30	Aug.,	1893—Common Lodging Houses.
30	Aug.,	1893—Nuisances.
25	Sept.,	1893—Decent Conduct: Conveniences.
13	Oct.,	1893—Removal of Offensive Matters.
12	Jan.,	1926—Fish Frier.
14	April,	1926—Cesspools in connection with Buildings.
5	Sept.,	1930—Slaughter Houses.
IO	Jan.,	1931—Deposit of Litter.
15	Sept.,	1932—Improvement Area No. 1.
	Sept.,	1932—Houses Let in Lodgings.
	Oct.,	1933—Improvement Area No. 2.
	May,	1934— " No. 3.
	Oct.,	1934— ,, No. 4.
	Oct.,	1934— ,, No. 5.
	Oct.,	1934— ,, No. 6.
	Oct.,	1934—Houses Let in Lodgings.
		1935—Improvement Area No. 7.
	Jan.,	1935— ,, No. 8.
I	Jan.,	1935— ,, No. 9.

GRAVESEND V.D. CLINIC.

I am indebted to Hamish Nicol, Esq., F.R.C.S., the Surgeon in charge of the Gravesend Clinic, for an abridged report of the work carried out during the year under the administration of the Kent County Council.

New Patients-Gravesend.

New La	Henris—	Jiaves	sellu.				
					Male.	Female.	Total.
Syph	ilis	******	£	********	9	I	10
Soft	Sore	******	*******	*******			
Gono	rrhoea	*******	****	******	25	12	37
Non-	venereal			******	21	S	29
					55	21	76
Avera	age No. o	of Grav	atients frovesend pa	tients	areas		260
tio	n during	1937	of Grav	******	76	34	IIO
			patients		3,283		
2 2	"	al	l areas se	erved	5,658		
Discharg	ges (all	distri	cts serve	ed).			
	rged cu			,	Male.	Female.	Total.
Syph	ilis	*******	******	******	II	5	16
Soft		******	******	*******	I		I
	rrhoea	0.006	***	eev ** ***	52	27	79
Non-	venereal	*****	*****	0,00000	55	22	77
				2 5			

Defaulted before	final tes	st of cu	ire.	Male	Female	Total
Syphilis	*******	*****	p = = = = 0			
Gonorrhoea	*******	*******	*****		3	3
Defaulted before	complet	ion of	treatm	ent.		
Syphilis	*****) = v = = = = =	******	6	13	19
Gonorrhoea		******	***	28	5	33
New Patients.						
Married		******	*****	47 P	er cent.	
Single or Wie	dowers	00070074	*****	53	"	
Contracted fr	om prost	itutes	******	67	,, ,,	
	" ama	iteurs ''	******	13	"	
	conso	rts	0>==9=00	II	"	
Deny sexual	intercour	se	00 0 400 00	9	"	
Contracted at	d Gravese:	nd	84827000	18	"	
	Rest of	Kent	*****	18)))	
	Essex	******	80410450	15	"	
	London	******	*******	3	,, ,,	
	Elsewhe	re in U.	K	6	,, ,,	
	Abroad	*******	*****	39	"	
History of pre (excl	evious V.l uding rel		tion	30	"	
Occupations:						
Seamen	********	*******	****	50	,, ,,	
Motor Driver	S	******	******	1.5	,, ,,	
Labourers	******		******	20	,, ,,	
Others	*******	*****	*****	28.5		

GRAVESEND AND NORTH KENT HOSPITAL.

I am grateful to Mr. C. E. Chapman for kindly sending me the following particulars as to the numbers treated in the various departments during the year.

It will be seen that the number of new patients was less than for the previous year, but a proportionate decrease is not shown in the number of attendances made.

		New Patients.		Subsec Attend	.A.
		1936	1937	1936	1937
In-Patients	******	2280	2040		
Gynaecological		95	74	164	ISI
Ante and Post Natal	******	237	223	1413	1350
Ear, Nose and Throat	******	460	444	545	492
CO2 Clinic		38	37	97	136
Orthopaedic Clinic		230	292	513	739
Medical Out-Patients	1/****	747	558	3579	3103
Casualties	******	5788	5557	20423	17966
Massage Clinic	******	453	452	14115	14684
Ophthalmic Clinic	*******	572	617	1350	1277
Varicose Veins Clinic	******	15	17	49	37
X-Ray		2895	2690		336
Dental Clinic	******	1634	1262		
Fractures	4004088	570	405	1016	1224
Totals	*******	16014	14668	43264	41525

Major Operations 1,046. Minor Operations 783

Total Attendances for 1937 54,153

Report of the Sanitary Inspector's Department for the Year 1937

SUMMARY OF INSPECTIONS AND REVISITS.

Dublic Health Asta						
Public Health Acts		_1				0 7 0
Dwelling-houses is		ea	0 0 0	- 000	0 0 9	952
Re-inspections .	• •	0 2 0	6 0 0	0 0 0	ф. <i>6</i> - 9	1338
Housing Asta					-	
Housing Acts:		J				0 = 7
Dwelling-houses in	_		9 9 0	o o o		371
Re-inspections .	* >		0 6 0	0 4 9	o	2385
Visits to Other Pre	emises	9				
Slaughterhouses .			2.4.4	2.2.4	9 9 9	1370
Butchers' shops (f meat)			22I
Dairies and Milks						216
Cowsheds	*	9 9 9	• • •			58
Provision Shops		* * *	0 0 0	. (a. (a.		505
Greengrocers			0 % 9	9 9 9		63I
Bakehouses		* * *	0 0 0	* * *	g- ts - 1	4I
Dining Rooms		0 > 3	0 9 6	ણ છ છ	(a) (b) (b)	115
Fishmongers		9 6 9	O 30 O	ge out of	0 9 9	
Butchers' shops		5 3 9	• • •	a 6 0	0 * 9	305
Ice Cream Premis		9- y- 11	0 0	0 0 0	6 9 9	29I
Other Food Prepa		ramicac	\$ (a &	On the Let	6 0 0	35
	_		o o o	0 0 4	0 0 0	42 126
Offensive Trades—		- 9	b b 0	9 9 0	0 0 0	
Smoke Observatio		craping	0 0 0	D & &	9 9 9	I2
		4 6 3	9 9 0	0 9 9	9 9 9	IO
Shops Acts	•	y 9 4	0 0 0	9 9 0	9 9 9	154
Factories	9	9 9 9	0 0 0	0 0 0	0 9 0	58
Workshops	y	g 9 u	9 9 9		9 9 9	76
Workplaces	9	0 0 0	0 0	@ (e .u	0 9 9	2
Outworkers	•	0 9 +	Q 0 G	\$ a g	9 9 9	2
Stables	y.	9 5 J	9 9 0			107
Piggeries	18		.	Ф ф (s	9 9 9	47
Urinals		0 0 0	• • •		0 0 W	302
Public Convenienc	es	0 3 0				972
Schools				0 0 0		96
Places of Entertai	nment	• • •			p 9 9	30
Rats and Mice	•	ф Ф ()				234
Infectious Disease			0 2 2	9 0 9	0 0 0	77
Housing Act, 1935-	-Meas					63
Enquiries re Overc			• • •			247
Miscellaneous		•••				608
••						
Total visits of all	kinds	• • •	• • •		7	[2099
		• • •	• • •			33

NOTICES SERVED AND COMPLIED WITH.

Under Public Health Acts (in	n respect	of dwel	ling hou	ses).
Written notices (informal))	• • •	• • •	397
Verbal notices (informal)				
Statutory notices (served s				
Notices complied with				617
•				·
Under Housing Acts (in re	spect of	dwellin	ng house	es).
Written notices (informal)				• 256
Verbal notices (informal)				25
Statutory notices (served st				
Notices complied with			0 + 4	
Miscellaneous.				
Written notices (informal)			• • •	4
Verbal notices (informal)				103
Notices complied with				
_				•
NUISANCES AND	DEFECT	rs ren	IEDIED.	,
A				
Animals in an unfit state		• • •		I
Ashbins provided			4 4 4	389
Cesspools—Filled in			• • •	
Enlarged or repaire				0
Chimney stacks—repaired or r			e # •	
New pots pr		• •	# 10 #	\cdots $\overline{5}$
Coppers repaired or new const		• •		34
Ceilings repaired or whitened.	• •	e 6	• • •	345
Damp-proof courses provided		 od	• • •	10
Doors and door sills repaired	. *	ea	• • •	28
Dampness of premises remedie		• •	% ♥ ♦	63
Drains—relaid or partly relaid		e •	• • •	2I
repaired	• •	e •	b 4 6	10
cleansed	• •	• •	• • •	IO
	• •	• •	e e e	116
		• •	• • •	83
Flushing cisterns—new provide	ea .	* •	0 4 4	43
repaired .	• •	• •	* * *	3
Food Cupboards—provided .	• •	• •	• • •	3
	• •	• •		I
* * * * * * * * * * * * * * * * * * *		* *	en en e	6
0 0 1	•• •	• •	0 0 4	12
Gutterings repaired or renewed		• •	0 • •	50
Light and ventilation—additio	nal provi	ided	• • •	32
Offensive matter removed .	• •	• •	A • •	5
Overcrowding abated .	• •	• •	• • •	73
Paintwork—external	• •	• •	• • •	86

Paving relaid or repaired				72
Rain Water pipes repaired or new				45
Roofs repaired		0 0 0	• • •	106
Sinks—new provided				16
Staircases—repaired			• • •	44
handrails, etc., provided	or repa	ired		II2
Stoves provided or repaired				62
Urinals—cleansed				2
repaired			0 0 0	I
Ventilating and soil pipes—new provide	led			8
repaired		o • •		6
removed		0 0 0	9 9 9	6
Verminous rooms cleansed		0 > 4	0 0 0	IOI
Walls repaired, papered or distemper	ed			36
Wash houses—new constructed		6 0 ¢		4
repaired, etc		6 0 0	. 0 0	19
Waste pipes provided or repaired		• • •	0 0 3	40
Water Closets—new constructed		o o •	6 6 9	9
repaired	de de réc	0 0 0	• • •	66
new pans provided	• • •	0 0 0	6 9 6	40
pans cleansed or unsto	opped	9 9 9	0 0 5	4
walls and ceilings clea	- A	0 0 0	9 0 9	28
Water supply over sinks	a + 2	9 9 4		14
Water tanks removed	6 9 9			2
Window frames, etc., repaired or ren	ewed		6 > 0	150
Window sash cords renewed	0 0 0	0 0 0	6 6 9	300
Other matters not included in above		0 0	6 6 6	102

FACTORIES AND WORKSHOPS ACT, 1901.

One hundred and thirty-six inspections of factories and workshops were made during the year. In 5 instances it was found necessary to give notice to remedy faults or defects.

The Bakehouses, 22 in number, were also inspected and in 4 instances faults or defects were found; I was discontinued.

Description.			o. of pections.	No. of Defects.	Remedied.
Bakehouses		* * *	41	4	4
Factories Workshops	<pre>0 > 0</pre>	0 0 0	58 76 }	5	5
Workplaces	• • •		2)	_	
			177	9	9

SHOPS ACTS, 1912-1934.

Shops have been kept under supervision for infringements of the above Acts.

During the year 154 visits were made to shops. Infringements were found in 25 instances and all were remedied.

The following is a summary of the faults or defects remedied:—

Provision of—Forms and Records	 25
Heating facilities	 I
Water closet accommodation	 I
Seats for female assistants	 I
Repairing and cleansing water closet accommodation	 I

Shopkeepers were advised as to the appropriate forms to obtain and 51 forms were provided at the request of this Department.

The following Certificate was issued:—

Exemption from provisions of sanitary accommodation ... I

CESSPOOL AND PAIL SYSTEM.

Cesspool emptying is carried out by means of a Dennis cesspool emptying machine with a capacity of 1,000 gallons and the sewage is disposed of at the Sewage Disposal Works.

During the year 830 tons of sewage were removed from 99 cesspools as against 1,819 tons from 356 cesspools the previous year.

There are now approximately 30 pails in use in the Borough, the use of 4 having been discontinued during the year and water-closets substituted therefor. Seven pails are emptied twice weekly by the Health Department, the remainder being dealt with by the owners or occupiers.

HOUSE AND TRADE REFUSE REMOVAL AND DISPOSAL.

Five Shelvoke & Drewry freighters and two Eagle-Thornycroft vehicles are employed in the collection of house and trade refuse. In May, 1937, four new Shelvoke & Drewry freighters of 10 cubic yards capacity were purchased to replace the five original 7 cubic yard freighters purchased in 1929.

The refuse is disposed of by means of controlled tipping and is still being tipped at the Gravesend Co-operative Society's Sports Grounds in Old Road East. It is estimated that this tip will last for a further three years.

During the year 5,570 loads of refuse weighing approximately 11,530 tons (including 510 loads of trade refuse weighing approximately 892 tons) were collected and tipped.

The following table shows the comparison with previous years. The reduction in the number of loads is accounted for by reason of the larger capacity vehicles now in use:—

Year.		Loads.	Tons.
1931		4,824	9,922
1932	• • •	4,810	9,450
1933	• • •	4,810	9,450
1933	• • •	4,890	9,947
1934		5,141	9,826
1935		5,615	10,202
1936		6,171	11,017
1937	• • •	5,570	11,530

SALVAGE FROM REFUSE.

Waste Paper:

Waste paper and cardboard is collected by the Corporation from business premises and private houses and then pressed into bales ready for collection by the Thames Board Mills, Ltd., to whom the Corporation are under contract to supply this material. During the year an electric baling press was purchased at a cost of £145 and this has greatly facilitated the work of baling.

The total weight of paper, etc., collected and sold during the year was 440 tons II cwts. 3 qrs. 26 lbs., as against 388 tons 2 cwts. 2 qrs. 22 lbs. the previous year.

Bottles and jars, salvaged from house refuse at the tip, are sold to a glass bottle manufacturers' agent, who collects them periodically; 253 gross were sold during the year as against 232 in the previous year.

DRAIN TESTING.

Fifty-six sets of drains in respect of 16 premises were tested during the year, of these 43 were found to be sound and in order and 13 or 23.2 per cent. were found to be defective.

In cases where drains were defective they were repaired or relaid, as necessary.

DISINFECTION OF PREMISES.

Two hundred and ten rooms were disinfected and 108 batches of bedding and clothing were removed to the Isolation Hospital and disinfected and returned or, in some cases, destroyed.

Thirty-nine library books found on infected premises were withdrawn, the libraries being compensated.

DISINFESTATION.

One hundred and one rooms were fumigated for eradication of vermin.

PUBLIC CONVENIENCES AND SCHOOLS.

The public conveniences and sanitary arrangements of the schools under the control of the Education Committee have been cleansed and flushed daily by the Health Department during the past year.

The conveniences attached to licensed premises have been kept under supervision and 302 inspections were made. One urinal was repaired and 4 were cleansed at the request of this Department.

RATS ORDERS.

Forty-two rat infested premises were dealt with during the year. Inspections were made in each case and the occupiers advised as to the best procedure.

The total number of visits made was 234. The premises were cleared in 36 cases and 6 were still under observation at the end of the year.

WATER SUPPLY.

Six samples of water were taken during the year, four of which were submitted for chemical analyses and two for bacteriological examination.

Arrangements have now been made with the County Analyst for samples of water to be submitted monthly for bacteriological examination.

The reports received on samples submitted during 1937 were as follows:—

Chemical Analyses of Water.

Gravesend Water Company's Supply.				
	(1)	(2)		
Appearance	Clear	Clear		
Smell	Normal	Normal		
Chlorine in Chlorides	1.33	1.12		
Phosphoric Acid in Phosphates	None	None		
Nitrogen in Nitrates	0.47	0.42		
Ammonia	Trace only	None		
Albuminoid Ammonia	0.0014	0.0017		
Oxygen absorbed in 15 minutes	Trace only	Trace only		
Oxygen absorbed in 4 hours	0.004	0.006		
Hardness before boiling (total)	19.5	19.8		
Hardness after boiling				
(permanent)	2.8	2.8		
Total solid matter	26.32	24.36		
Microscopical examination of	Slight and	Slight and		
deposit	unimportant	unimportant		
Metallic impregnation	None	None		

Higham & Hundred of Hoo Company's Supply.

	(3)	(4)
	Clear	Clear
	Normal	Normal
Chlorine in Chlorides	8.47	7.56
Phosphoric Acid in Phosphates	None	None
Nitrogen in Nitrates	0.64	0.65
Ammonia	None	None
Albuminoid Ammonia	0.0028	0.0028
Oxygen absorbed in 15 minutes	Trace only	Trace only
Oxygen absorbed in 4 hours	0.014	0.012
Hardness before boiling (total)	20.5	20.8
Hardness after boiling	Ü	nd.
(permanent)	5.I	4.9
Total solid matter	41.02	38.36
Microscopical examination of	Slight and	Slight and
deposit	unimportant	unimportant
Metallic impregnation	None	None

All the samples were satisfactory and indicated water organically pure and free from sewage percolation.

Bacteriological Examination of Water.

	_	isms per c.c growth on	B. coli (Presumptive)	
	37 C.	22 C.	-	
Gravesend Water				
Company's supply	5	IO	Absent in 100 ccs.	
Higham & Hundred of	~			
Hoo Company's				
supply	0	2	Absent in 100 ccs.	
Remarks: Good	waters.			

MILK SUPPLY.

There are 4 cowkeepers on the register and 58 visits of inspection were made to the farms concerned. There are also 85 milkshops and dairies and 216 inspections of these were made.

Bacteriological Examination of Milk.

Fourteen samples of milk were obtained and submitted to the County Laboratories for bacteriological examination. These were all satisfactory with the exception of one sample which contained bacillus coli.

Seven samples of milk were also examined for tubercle bacilli and a positive result was recorded in one case. The infected animal was traced and slaughtered under the Tuberculosis Order, 1925.

Sediment Tests:

Fifteen samples of milk were examined for cleanliness, and the results were, on the whole, satisfactory.

Milk (Special Designations) Order, 1936.

The following licences were issued during the year under the above order:—

"Tuberculin Tested" Milk:-

Bottling licences	• • •	* * *	• • •		4 4 0	2
Dealer's licence						I
Dealer's suppleme	entary	licence	0 • •	4, 4 0		Ι

"Pasteurised" Milk:

Pasteurisers'	licences	 e ¢ ¢	z • •	 2
Dealers' licer	ices	 • • •	6 6 6	 3

SLAUGHTER HOUSES.

There are five private slaughter houses in the Borough and the visits numbered 1,370. It was found necessary in one instance to call the attention of the occupier to the necessity for cleansing the premises, and the work was carried out.

PUBLIC HEALTH (MEAT) REGULATIONS, 1924.

The provisions of the Public Health (Meat) Regulations, 1924, have been enforced. Notice of slaughter is required and the inspection of meat carried out as far as possible at the time of slaughter.

During the year the number of carcases inspected was as follows:—

Beasts.	Calves.	Pigs.	Sheep.
430	131	1654	1858

In addition to visits to slaughter houses, 221 visits to butchers shops were also made for this purpose.

SLAUGHTER OF ANIMALS ACT, 1933.

The provisions of this Act relating to the humane slaughtering of animals have been complied with. The number of slaughtermen holding licences at the end of the year was 22. No additional licences were granted during the year.

CONDEMNED FOOD.

8	Bovine	Carcases	and	Offal	(Tuberculosis)
6	,,	,,	,,	,,	(Tuberculosis and Johnes
					Disease)
I	,,	,,	,,	,,	(Uraemia).
3	Forequa	arters of	Beef		(Tuberculosis)

50 lbs. Beef	(Tuberculosis)	
2 Sheep Carcases and Offal	(Bruised)	
~ *	(Fevered)	
· · · · · · · · · · · · · · · · · · ·		
I ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	(Dropsical)	
I Pig Carcase and Offal	(Tuberculosis)	
I ,, ,, ,, ,,	(Fevered)	
I ,, ,, ,, ,,	(Abscesses)	
23 Bovine Heads	(20 Tuberculosis)	
T 1	(3 Actinomycosis)	
,, Tongues	(19 Tuberculosis)	
*	(5 Actinomycosis)	
39 ,, Lungs	(Tuberculosis)	
16 ,, Livers	(4 Tuberculosis)	
	(5 Flukes)	
	(1 Cavernous Angiom	a)
	(5 Abscesses)	
	(I Necrosis)	
9 ,, Mesenteries	(Tuberculosis)	
ı " Udder …	(Mammitis)	
4 ,, Skirts	(3 Tuberculosis)	
	(I Abscess)	
ı ,, Spleen	(Tuberculosis)	
2 ,, Kidneys	(Nephritis)	
20 Sheep Livers	(10 Flukes)	
,	(2 Cirrhotic)	
	(8 Parasitic)	
25 Sheep Lungs	(24 Parasitic)	
3	(4 Congested)	
21 Pigs' Heads	(Tuberculosis)	
7 ,, Lungs	(6 Tuberculosis)	
,,, ~g~	(1 Pneumonia)	
18 ,, Livers	(9 Cirrhotic)	
,, 1417 (15)	(5 Parasitic)	
	(4 Tuberculosis)	
a Splaans	(Tuberculosis)	
2 ,, Spleens		
52 ,, Plucks	(Unsound)	
636 lbs. Beef	•••	
18 lbs. Lamb	•••	
29 lbs. Bovine Liver	*** ;;	
6 lbs. Calves' Kidney	,,,	
115 lbs. Lambs' Livers	*** ,,	
30 lbs. Sheep Livers	•••	
2 Chicken	•••	
7 Rabbits	•••	
5 stones Dogfish	•••	
695 lbs. Herrings	• • • • • • • • • • • • • • • • • • • •	
70 lbs. Kippers	•••	
210 lbs. Haddock	•••	
7 lbs. Plaice	***	
7 lbs. Roker	•••	
13 lbs. Halibut	•••	

APPROXIMATE WEIGHT.

		Tons.	cwts.	qrs.	lbs.
Beef and Organs		6	I	3	O
Mutton and Organs			4	Ι	12
Pork and Organs			7	I	8
Miscellaneous	• • •		9	3	IO
Total	• • •	7	3	I	2

FOODS AND DRUGS (ADULTERATION) ACT, 1928.

111 samples were taken under the Food and Drugs (Adulteration) Act, 1928, and submitted to the Public Analyst. Particulars of the samples and a summary of the result is shown in the following table:—

Samples.		Number of Formal. Informal.						
Boiled Sweets		,		2			2	
Butter		4				3	I	
Candied Peel				2		2		
Cheese		2				2		
Chicken & Ham 1	Roll	I				I		
Cocoa				2		2		
Coffee				2		2	4	
Cream (Tinned)				2		2		
Fish Paste		2				2	1	
Gin		3				3		
Lard		3				3		
Lemonade Powde	er			2		2	v	
Margarine		3				3	lann-sommelille der	
Milk		60	1			59	I	
Mince Meat		1		2		2		
Rum		3				3		
Sausages, Beef		3				3		
Sausages, Pork		2	1			Ï	I	
Sausage, Lunche	eon	I				I	h	
Sponge Cakes			1	2		2		
Tea			1	2		2		
Whisky	• • •	6				6	-	
		93		18		106	5	

Particulars of Adulterated Samples.

Two samples of boiled sweets contained 3.5 grains and 10.3 grains per ounce respectively of Steatite (Talc). The Town Clerk communicated with the firm concerned.

One butter sample contained just over the limit of 16% of water and a letter of caution was sent to the manufacturer.

One milk sample contained 2.98% of fat instead of 3%, and a letter of caution was sent to the vendor.

One sample of pork sausages contained 75 parts per million sulphur di-oxide. A letter of caution was sent to the vendor.

MERCHANDISE ACT, 1926.

Proceedings were taken against a butcher for removing the brand from fourteen legs of Argentine pork and also for failing to exhibit the requisite notice. The defendant was fined £7 and 10/- costs.

It was also necessary in some instances to warn shopkeepers for not exhibiting notices.

OFFENSIVE TRADES.

Bye-laws are in force in the Borough for regulating the trade of Fish Frying.

There are 20 premises registered as offensive trades, consisting of 19 fish frying establishments and 1 gut scraping factory.

The latter was established in January, 1935, and consent was given by the Council for a period of three years. The licence was renewed for a further 12 months in October, 1937.

126 Visits of inspection to fish frying establishments and 12 visits to the gut scraping factory were made.

PROSECUTIONS.

Merchandise Marks Act, 1926.

Failing to exhibit notice and removing brands from 14 legs of Argentine Pork. Fined £7 and 10/- costs.

Vital Statistics of whole District during 1937 and previous Years.

Table I.

District.	At all ages.	Rate.	13	11.2	13.0	10.7	11.2	10.5	11.3	10.4	10.0	I.I.I	11.5
ing to the]	At al	Number.	12	384	441	375	393	376	398	364	382	440	466
Nett deaths belonging to the District.	Under 1 year of age	Rate per 1000 nett Births.	11	47.7	41.7	39.0	33.0	8.29	57.7	60.4	45.9	37.2	53.4
Nett dea	1	Number.	10	30	27	27	22	41	34	33	27	23	32
Transierable Deaths	ot Residents not	registered in the District.	6	4.8	46	47	28	24	56	63	56	99	80
Transierab	of Non- residents		∞	62	89	53	42	34	92	96	84	65	102
ths Regis- ie District		Rate.	7	11.6	13.6	6.01	9.11	11.4	8.11	11.4	12.2	11.18	14.3
Total Deaths Regi tered in the Distri		Number.	9	398	463	384	407	410	418	397	468	430	568
	Nett.	Rate.	ιC	18.3	18.8	19.7	18.6	8.91	16.7	15.6	15.4	15.6	15.1
Births.	Z	Number.	4	628	647	692	661	604	589	546		617	599
		orrected Number.		632	651	694	699	612	598	96.5	647	714	694
Popula-	tion estimated	to middle of each year.	01	34126	33780	35000	35400	35800	35180	34700	38130	30340	39460
		Year.	н	1928	1020	1030	1031	1032	1033	1034	1035	1036	1937

1937.
year
the
s of, and ages at, Death during the year 1937.
Death
at,
ages
and
of,
Causes

Table II.

Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District	Hospitals and Institutions	II		- 2 1 5 1 1 1 2
ing	65 and up- wards	OI	179	1 8 1 1 8 4
ier occuri	45 and under 65 years	6	122	10 10 10 26 26
s" whetl rict.	25 and under 45 years	S S	89	
ages of "Residents" whether occurring or without the district.	15 and under 25 years	7	31	7 I I I I I I I I I I I I I I I I I I I
l ages of " or without	5 and under 15 years	9	9	! ! H ! H H
subjoined within o	2 and under 5 years	5	9	
	ı and under 2years	4	10	
Nett Deaths at the	Under 1 year	3	32	I
Ne	All Ages.	. 6	466	10 10 10 10 10 10 10 10 10 10 10 10 10 1
CAUSES OF DEATH.	()		Certified All Causes Uncertified	Typhoid Fever Measles Scarlet Fever Whooping Cough Diphtheria Encephalitis Lethargica Tuberculosis Resp. Other Tuberculosis Syphilis General Paralysis of the insane Cancer Diabetes Heart Disease Typhoid Fever Encephalitis Lethargica Cherebral Haemorrhage Heart Disease

11 12 12 14 17 17 17 17 17 17 17	266
11 19 10 10 11 10 10 10 10 10 10 10 10 10 10	216
mo m m m m m H m m m H	123
н са а н н в а н а а а	51
\(\tau \) \(32
	9
I	9
	0I
1 2 3 5	32
2	466
Aneurysm Other Circulatory Dis Bronchitis Preumonia Other Respiratory Dis Peptic Ulcer Diarrhoea, etc., under 2 yrs. Appendicitis Cirrhosis of Liver Other Liver Dis Other digestive diseases Nephritis Nephritis Congenital debility, premature birth, etc Senility Suicide Other Violence Other Defined Diseases Diseases Ill-defined or unknown	Totals

Table III.

Infant Mortality.

Nett Deaths from stated causes at various Ages under I Year of Age, for the year 1937.

Cause of Death.	Under 1 week.	I-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 1 month.	I-3 months.	3-6 months.	6-9 months.	9-12 months.	Total Deaths under 1 year.
All causes { Certified Uncertified	12		I	I	14	9	- 5	3	I	32
Small Pox Chicken Pox Measles Scarlet Fever Diphtheria and Croup Whooping Cough Diarrhoea Enteritis Tuberculous Meningitis Abdominal Tuberculosis Other Tuberculous Diseases Congenital Malformations Premature Birth Atrophy, Debility and Marasmus Atelectasis Injury at Birth Erysipelas Syphilis Rickets Meningitis (not Tuberculous) Convulsions Gastritis Laryngitis Bronchitis Pneumonia (all forms) Suffocation, overlying Other causes	6 3		I	I	6 3 1 1	2 2 1 2	1 . I	I	I	3 I I 6 2 3 6 2 5
Totals	12		I	I	14	9	5	3	I	32
Nett Births in the Year illegitimate 20 Illegitimate 20 Illegitimate 20 Illegitimate In the Year illegitimate 20 Illegitimate Illegitim										

Infectious Diseases notified during the Year 1937. Showing the age periods and cases removed to Hospital. Table IV.

Total Cases Removed to Hospital.		8 140 I	29
At Ages—Years.	65 and over		4
	45 and under 65 years		10
	25 and under 45 years	241 10 10 10	30
	15 and under 25 years	н ∞ က	12
	5 and under 15 years	11 14 12 62	62
	nand under 5 years	10 1 1 1 1 1 1 1 1 1	II
	Under I year.		
	Total at all Ages.	11 57 6 1 7 8	129
Diseases.		Diphtheria Small Pox Cholera Scarlet Fever Erysipelas Puerperal Pyrexia Cerebro Spinal Fever Poliomyelitis Cholera Cerebro Spinal Fever Poliomyelitis Tuberculosis Pulmonary Tuberculosis Other Forms Pneumonia Cholipheria	Totals

Table V.

Birth-rates, Death-rates, Analysis of Mortality, Maternal Death-rates, and Case-rates for certain Infectious Diseases in the year 1935.

England and Wales, London, 125 Great Towns and 148 Smaller Towns.

(Provisional Figures based on Weekly and Quarterly Returns)

	GRAVESEND	England and Wales.	and Great Towns including London.	148 (Resident Populations 25,000 to 50,000 at 1931 Census).	London Adminis- trative County.	
	Rates per 1,000 Population					
BIRTHS:—						
	15.17	14.9	14.9	15.3	13.3	
Still	0.70	0.60	0.67	0.64	0.54	
DEATH:— All Causes	11.55	12.4	12.5	11.9	12.3	
Typhoid and Para-	11.55	1 - 4	14.5	11.9	14.5	
typhoid fevers	0.00	0.00	0.01	0.00	0.00	
Smallpox						
Measles Scarlet fever	0. 0	0.02 0.01	0.03	0.02 0.01	0.0I 0.0I	
Whooping Cough	0.05	0.01	0.01	0.03	0.06	
Diphtheria	0.00	0.07	0.08	0.05	0.05	
Influenza	0.40	0.45	0.39	0.42	0.38	
Violence	0.60	0.54	0.45	0.42	0.51	
NOTIFICATIONS Smallpox	0.00	0.00		0,00,		
Smallpox Scarlet fever	0.00 I.44	2.33	2.56	2.42	2.09	
Diphtheria	0.27	I.49	1.81	1.38	1.93	
Enteric fever	0.00	0.05	0.06	0.04	0.05	
Erysipelas	0.15	0.37	0.43	0.34	0.44	
Pneumonia	0.20	1.36	1.58	0.20	1.18	
	Rates per 1,000 Live Births					
Deaths under 1 year of						
age	53	58	62	55	(0	
Deaths from Diarrhoea						
and Enteritis under	i	0			7.0.0	
2 years of age	II.	5.8	7.9	3.2	12.0	
MATERNAL						
MORTALITY:—						
Puerperal Sepsis	3.33	0.97)			
Others		0.97 2'26)	Not availble		
Total	5.00	3.23)			
	R	lates per	1,000 Births (i.	e., Live and Still)		
MATERNAL	T					
MORTALITY:—						
Puerperal Sepsis	3.18)			
Others	1.55	2.17) No	ot available		
Total	4.78	3.11)			
Notifications:— Puerperal fever				1	4.15	
Puerperal pyrexia	1.50	13.93	17.59	11.25	14.34	
1 10	1	3.75	, 55			

